



molded case switch 3VA5 UL frame 250 max. sh-circ breaking capacity 65kA @ 480 V 3-pole, line protection MCS110,  $I_n=250A$  without overload protection self-protection  $I_i=10 \times I_n$  nut keeper kit on both sides

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SETRON                      |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | HFAS                        |
| design of the product                                                                                                      | Molded case switch          |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                         |
| design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type)                      | No                          |
| design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)                                | No                          |
| design of the overcurrent release                                                                                          | MCS110                      |
| protection function of the overcurrent release                                                                             | I                           |
| number of poles                                                                                                            | 3                           |
| General technical data                                                                                                     |                             |
| insulation voltage / rated value                                                                                           | 800 V                       |
| operating voltage / at DC / rated value                                                                                    | 750 V                       |
| operating voltage / at AC / rated value                                                                                    | 690 V                       |
| power loss [W] / maximum                                                                                                   | 54.4 W                      |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 18.13 W                     |
| mechanical service life (operating cycles) / typical                                                                       | 20 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                                           | 8 000                       |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                                               | 4 000                       |
| electrical endurance (operating cycles) / at 480 V                                                                         | 8 000                       |
| electrical endurance (operating cycles) / at 600 V                                                                         | 4 000                       |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof                      | No                          |
| product function                                                                                                           |                             |
| • communication function                                                                                                   | No                          |
| • other measurement function                                                                                               | No                          |
| Net Weight                                                                                                                 | 2.7 kg                      |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | No                          |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 250 A                       |
| • at 45 °C                                                                                                                 | 244 A                       |
| • at 50 °C                                                                                                                 | 239 A                       |
| • at 55 °C                                                                                                                 | 233 A                       |
| • at 60 °C                                                                                                                 | 227 A                       |
| • at 65 °C                                                                                                                 | 222 A                       |
| • at 70 °C                                                                                                                 | 216 A                       |

| Switching capacity according to IEC 60947                                                 |                                                                                                                                                                |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| design of short-circuit protection                                                        | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |
| Adjustable parameters                                                                     |                                                                                                                                                                |
| adjustable response value setting current (Ii) / for I-tripping                           |                                                                                                                                                                |
| • minimum                                                                                 | 2 500 A                                                                                                                                                        |
| • maximum                                                                                 | 2 500 A                                                                                                                                                        |
| adjustable setting current (InN) / for N-tripping                                         |                                                                                                                                                                |
| • minimum                                                                                 | 0 A                                                                                                                                                            |
| • maximum                                                                                 | 0 A                                                                                                                                                            |
| product function / grounding protection                                                   | No                                                                                                                                                             |
| Mechanical Design                                                                         |                                                                                                                                                                |
| product component                                                                         |                                                                                                                                                                |
| • undervoltage release                                                                    | No                                                                                                                                                             |
| • voltage trigger                                                                         | No                                                                                                                                                             |
| • trip indicator                                                                          | No                                                                                                                                                             |
| height [in]                                                                               | 7.28 in                                                                                                                                                        |
| height                                                                                    | 185 mm                                                                                                                                                         |
| width [in]                                                                                | 4.13 in                                                                                                                                                        |
| width                                                                                     | 105 mm                                                                                                                                                         |
| depth [in]                                                                                | 3.27 in                                                                                                                                                        |
| depth                                                                                     | 83 mm                                                                                                                                                          |
| Connections                                                                               |                                                                                                                                                                |
| arrangement of electrical connectors / for main current circuit                           | Front connection                                                                                                                                               |
| type of electrical connection / for main current circuit                                  | nut keeper kit on both ends                                                                                                                                    |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum | 13 x 1 mm                                                                                                                                                      |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 25 x 8 mm                                                                                                                                                      |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)     | silver                                                                                                                                                         |
| Auxiliary circuit                                                                         |                                                                                                                                                                |
| number of CO contacts / for auxiliary contacts                                            | 0                                                                                                                                                              |
| Accessories                                                                               |                                                                                                                                                                |
| product extension / optional / motor drive                                                | Yes                                                                                                                                                            |
| Environmental conditions                                                                  |                                                                                                                                                                |
| protection class IP / on the front                                                        | IP40                                                                                                                                                           |
| ambient temperature                                                                       |                                                                                                                                                                |
| • during operation / minimum                                                              | -25 °C                                                                                                                                                         |
| • during operation / maximum                                                              | 70 °C                                                                                                                                                          |
| • during storage / minimum                                                                | -40 °C                                                                                                                                                         |
| • during storage / maximum                                                                | 80 °C                                                                                                                                                          |
| reference code / according to IEC 81346-2                                                 | Q                                                                                                                                                              |
| Approvals / Certificates                                                                  |                                                                                                                                                                |
| General Product Approval                                                                  |                                                                                                                                                                |



|                          |     |                   |       |
|--------------------------|-----|-------------------|-------|
| General Product Approval | EMV | Marine / Shipping | other |
|--------------------------|-----|-------------------|-------|

[Miscellaneous](#)



[Miscellaneous](#)

[Confirmation](#)

|       |             |
|-------|-------------|
| other | Environment |
|-------|-------------|

## Further information

## Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

## Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

## Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5225-0BB32-0AA0>

## Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5225-0BB32-0AA0>

## Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5225-0BB32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5225-0BB32-0AA0)

## CAx-Online-Generator

<http://www.siemens.com/cax>

## Tender specifications

<http://www.siemens.com/specifications>





